

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**  
**BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES**

Applicant: Daniel J. Fisher                      Examiner: Bryan R. Muller  
Serial No.: 10/821,071                      Group Art Unit: 3723  
Filed: April 8, 2004                      Docket No.: M120.253.101 / 59554US002  
**Due Date:** November 20, 2007  
Title: ATTACHMENT SYSTEM FOR A SANDING TOOL

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**REPLY BRIEF TO EXAMINER'S ANSWER**  
**TO THE BOARD OF PATENT APPEALS AND INTERFERENCES**

**Mail Stop Appeal Brief – Patents**  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

**REPLY BRIEF UNDER 37 C.F.R. §41.41**

This Reply Brief is responsive to the Examiner's Answer mailed September 20, 2007, and supports the Notice of Appeal filed on April 17, 2007 appealing from the final rejection dated January 17, 2007 of claims 1-9, 14, 15, 28-34, 37, 38, 41, and 42 of the above identified application. Twenty-two claims remain for consideration.

The U.S. Patent and Trademark Office is hereby authorized to charge required fees to Deposit Account No. 50-0471 at any time during the pendency of this application. Please charge fees required or credits due to Deposit Account 50-0471 pursuant to 37 C.F.R. §1.25. Additionally, this notice is authorization to charge Deposit Account 50-0471 for any fees due under 37 C.F.R. §§1.16, 1.17, 1.19, 1.20 and 1.21.

**Appellant's Reply Brief to Examiner's Answer to the Board of Patent Appeals and Interferences**

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**ARGUMENT**

All arguments presented in Appellant's Appeal Brief are incorporated by reference herein. Further, Appellant responds to the Examiner's Answer as follows.

**I. FIRST GROUNDS OF REJECTION**

With respect to the rejection of independent claim 28, as well as claims 29-32 depending therefrom, the Examiner's Answer appears to agree that Kleemeier does not teach co-planar attachment and non-attachment surfaces (relative to the respective termination planes of the surfaces), in that the terminal ends of the filaments 16, 17 (identified in the Examiner's Answer as defining the claimed "attachment surface") are spaced from the "non-attachment surface" purportedly defined by the flexible resin layer 14. The Examiner's Answer, instead, argues that claim 28 is effectively withdrawn as reading on a non-elected species. Appellant respectfully disagrees.

In particular, the species election requirement in question issued October 4, 2005 ("Examiner's Species Requirement"), and set forth a description of the patentably distinct species identified by the Examiner. Eight different species were described, none of which related to a co-planar arrangement of surfaces. Instead, the Examiner's Species Requirement described fasteners, types of inhibition, types of coating, and characteristics of the non-attachment region. With the non-attachment region species identification, no distinction or explanation was set forth regarding co-planarity (or lack thereof) of the non-attachment region's surface(s) relative to other surfaces. Further, the Examiner's Species Requirement did not identify any figures from the pending application to which the identified species were related. It is reasonable for Appellant to assume that the Examiner's Species Requirement was complete, and that all distinguishing characteristics of the species of concern to the Examiner were identified. Thus, the election filed in response to the Examiner's Species Requirement was not and could not be limited to a particular figure(s), nor could the election be limited in terms of surface planes.

**Appellant's Reply Brief to Examiner's Answer to the Board of Patent Appeals and Interferences**

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In light of the above, Appellant respectfully disputes the Examiner's current assertions that the "co-planar" features of claim 28 are directed toward a non-elected species. In fact, with the Examiner's Species Requirement, claim 14 was specifically identified as being generic to all identified species; claim 14, in turn, specifically recited (currently, as well as the at the time of the Examiner's Species Requirement) "said attachment region and said non-attachment region are co-planar." Thus, all limitations of claim 28, including the "co-planar" feature that distinguishes over Kleemeier, are commensurate with the species elected in response to the Examiner's Species Requirement. As set forth in Appellant's Appeal Brief, then, claim 28, as well as claims 29-34 depending therefrom, are allowable.

**II. SECOND GROUNDS OF REJECTION**

In response to the Examiner's repeated rejection of independent claim 1, Appellant respectfully reasserts a position that Kleemeier fails to teach a conversion pad for attaching an abrasive article to a back-up pad of a sanding tool for the reasons set forth in Appellant's Appeal Brief. In addition, it is noted that claim 1 recites the edge of the major surface of the conversion pad is "for forming an attachment" with the mating surface of the abrasive article "that is weaker" than attachment between the attachment region of the conversion pad with the same mating surface of the abrasive article. With respect to these features, the Examiner's Answer identifies the outer region of the resin layer 14 of Kleemeier (along which the filaments 16, 17 are absent) as being the "non-attachment region" of claim 1. Appellant respectfully disagrees. In particular, claim 1 requires more than simply the complete absence of attachment material. More particularly, the claimed non-attachment region must be capable of forming an attachment with the abrasive article, but at a reduced or weaker "level" as compared to the attachment achieved with the attachment region. In contrast, the "empty" outer region associated with the resin layer 14 of Kleemeier is entirely void of any possible attachment relative to the abrasive article 20. Thus, Kleemeier is even further removed from claim 1. For at least these reasons, then, it is respectfully submitted that claim 1, as well as depending claims 2-7, 14, and 15, are allowable over Kleemeier.

**Appellant's Reply Brief to Examiner's Answer to the Board of Patent Appeals and Interferences**

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**III. THIRD GROUNDS OF REJECTION**

In rejecting claims 8 and 9, the Examiner's Answer argues that Long is analogous. Appellant respectfully disagrees for all of the reasons set forth in Appellant's Appeal Brief. In short, one of skill would not remotely consider the diaper tabs of Long in constructing a conversion pad for a sanding tool. In addition, Kleemeier describes a specific manufacturing approach for embedding the filaments 16, 17 within the flexible resin layer 14. *See Kleemeier at col. 2, l. 64 – col. 3, l. 14.* In particular, a scrim cloth mask is applied to the perimeter of the resin layer 14 so as to prevent embedding of the filaments 16, 17. Thus, Kleemeier will never have “excess” filament 16, 17 along the perimeter edge of the resin layer 14 to otherwise be modified in the manner purportedly disclosed in Long. Thus, not only is Long non-analogous art, but Kleemeier teaches away from the asserted modification. For at least these reasons, then, claims 8 and 9 are allowable over the cited art.

**IV. FOURTH GROUNDS OF REJECTION**

In rejecting claims 33 and 34, the Examiner's Answer presents similar arguments as described above with respect to claims 8, 9, and 28. For all of the reasons previously presented, it is respectfully submitted that claims 33 and 34 are allowable.

**V. FIFTH GROUNDS OF REJECTION**

In rejecting claim 37, the Examiner's Answer asserts that one of skill would consider it obvious to modify Kleemeier to align the clearly non-aligned edges of the rubber layer/back-up pad 13, the resin layers/conversion pad 14, and the abrasive article 20. Appellant respectfully disagrees for all of the reasons set forth in Appellant's Appeal Brief, including the overriding premise of Kleemeier that the rubber layer/back-up pad 13 must define an enhanced outer diameter to prevent wall damage. In addition, it is noted that none of the secondary references cited in the Examiner's Answer (Ali, Edinger, Clemente, and Manor) teach a system having separate, distinct back-up pad, conversion pad, and abrasive article components. Thus, much like Kleemeier, the separate conversion pad and back-up pad elements of claim 37 are not

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present in the prior art. For at least these reasons, then, claim 37 and claim 38 depending therefrom, are allowable.

Claim 41 is also allowable due to its dependency from claim 37. In addition, claim 41 recites that the conversion pad is removably connected to the back-up pad. In contrast, the resin layer 14 (interpreted by the Examiner as being the claimed "conversion pad") is not removably connected to the rubber layer 13 (interpreted as being the claimed "back-up pad"). To the contrary, Kleemeier specifically states that the resin layer 14 is affixed to the rubber layer 13. *Kleemeier at col. 3, l. 74 – col. 4, l. 4.* Thus, claim 41 further defines over the cited art.

**VI. SIXTH GROUNDS OF REJECTION**

As set forth in the Appellant's Appeal Brief, claim 42 is allowable over the cited art due to at least its dependency from claim 37, as well as for the reasons advanced with respect to claims 8 and 9.

**CONCLUSION**

Any inquiry regarding this Reply Brief should be directed to David B. Patchett at Telephone No. (651) 736-4713, Facsimile No. (651) 736-3833. In addition, all correspondence should continue to be directed to the following address:

**Appellant's Reply Brief to Examiner's Answer to the Board of Patent Appeals and Interferences**

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Respectfully submitted,

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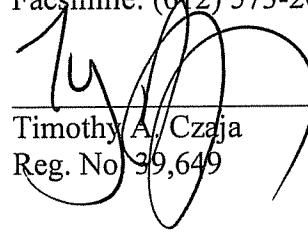
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Dated: November 20, 2007  
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